



The Global Society will need commodities; how do we prepare for the future?

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The global population currently stands at approximately 7 billion and is expected to increase to between 8.3 and 10.9 billion by 2050. To put this into perspective, today's global population is triple what it was in 1950. Commodities are required for healthy societies, for robust economies and to raise living standards in the developing world. With major increases the population particularly in nations with emerging economies, the demand for commodities such as water, energy and minerals will significantly increase during the next several decades. Among the concerns are clean and available freshwater, expanded energy sources from natural gas and nuclear to renewable energy, and emerging needs for specialty materials that are needed for advanced technology to expanded use of more conventional minerals for agriculture and commerce. The developing world may have the greatest need for these commodities and also be the source of many of them.

At the conclusion of the International Year of Planet Earth, a small group was formed to assess the need for a major scientific effort in the geosciences. Under the auspices of the International Union of Geological Sciences (IUGS), the strategic initiatives group met and a broad initiative entitled 'Resourcing Future Generations' (RFG) that was designed to implement a scientific strategy to address the increasing demand for commodities over the next 25 years. The initiative focused on water resources, energy and minerals. The group felt strongly that the minerals component should be the initial emphasis and hoped that other global scientific organizations like IUGS would embrace the water and energy themes.

Since this initial effort a number of workshops and presentations have been made including China, the International Geological Congress in Brisbane, the Davos Summit, Berlin, and Namibia amongst others. The strategic initiative planning group identifies 4 challenges to meeting future global mineral needs which are improved understanding of demand, discovery, extraction and social impact. RFG-Minerals consists of 4 major components: (1) understanding supply and demand, (2) gaining better knowledge of the subsurface, (3) improving technologies to safely and efficiently extract resources and (4) building social support and capacity in the developing world. This is ambitious effort that will require broad global collaboration across academia, government and industry.